

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for diverting communication traffic in an optical communication network which comprises first optical transmission and reception links extending between a first location and a second location and carrying traffic in normal operation mode between the first location and the second location, and second transmission and reception links adapted to carry traffic diverted from the first optical transmission and reception links in the event of a fault in at least one of the first optical transmission link and the first optical reception link, which method comprises the steps of:

determining whether a total of the energy received over a first optical link at the second location exceeds a pre-defined threshold;

in the case that the total energy thus received does not exceed the pre-defined threshold, diverting the traffic transmission and reception at the second location to the corresponding second links;

determining whether a total of the energy received via a first optical link at the first location exceeds a pre-defined threshold; and

in the case that the total energy thus received at the first location does not exceed the pre-defined threshold, diverting the traffic transmission and reception at the first location to the corresponding second links.

2. (previously presented) A method for routing traffic to a protection channel in an optical communication network which comprises a plurality of telecommunication channels extending between first and second locations, the telecommunication channels comprising a plurality of channels for carrying traffic in normal operation mode from the first location to the second location and at least one protection channel for carrying traffic in the event of a fault in at least one of the channels carrying traffic in normal operation mode, which method comprises the steps of:

detecting a fault on at least one of the channels carrying traffic in normal operation mode, at the second location;

switching at the second location the transmission and reception paths associated with said at least one failing channel to the at least one protection channel;

detecting a fault on said at least one channel at the first location; and

switching at the first location the transmission and reception paths associated with said at least one faulty channel to the at least one protection channel.

3. (original) A method according to Claim 2, wherein said at least one protection channel is used for protecting at least one pre-designated channel out of the plurality of telecommunication channels.

4. (original) A method according to Claim 2, wherein said at least one protection channel is used for protecting a plurality of telecommunication channels.

5. (canceled)

6. (currently amended) An optical communication system comprising a plurality of telecommunication channels extending between first and second locations, the channels comprising a plurality of forward channels for carrying traffic in normal operating mode from the first location to the second location, at least one protection link for carrying the traffic of at least one of said forward channels in the event of fault in said at least one forward channel, wherein in response to a detection of loss of signal in said at least one forward channel, traffic designated to be transmitted along said at least one forward channel is diverted to said at least one protection link at each of the first and second locations, ~~independent of detecting a loss of signal at the other of said first and second locations.~~

7. (canceled)

8. (previously presented) An optical communication system according to Claim 6, further comprising means adapted to monitor the operability of the protection link during normal operation mode of the system.

9. (canceled)

10. (original) A method according to Claim 1, further comprising monitoring the operability of the protection link when said protection link is not used for transmission of traffic during normal operation mode.